

REMARKS

Status of Claims

In the present application Claims 1-27 are pending, of which Claims 1, 12 and 26 are independent claims.

No claim amendment is requested in this Request for Reconsideration; however, for the convenience of the Examiner, all pending Claims 1-27 are reproduced as an attachment entitled "Claims".

In the Office Action, Claims 1-27 were rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement. Additionally, Claims 1-4 and 7-9 were rejected in the Office Action under 35 U.S.C. §103(a) as allegedly obvious over Parker (U.S. Pat. No. 5,745,365) with or without Houston et al. (U.S. Pat. No. 4,931,657) or Rule, Jr. (U.S. Pat. No. 6,129,817) or Bialkowski (U.S. Pat. No. 4,500,968) with or without SHERLOCK® (Applicants' specification, p. 15, ll. 5-8); Claim 5 was rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Parker as applied to Claim 1 above, and further in view of Rule, Jr.; Claim 5 was further rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Parker with or without Houston et al. or Bialkowski as applied to Claim 1 above, and in further view of Rule, Jr.; Claims 6 and 10-25 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Parker with or without Houston et al. or Rule, Jr. or Bialkowski as applied to Claim 1 above, and further in view of allegedly Admitted Prior Art (Applicants' specification, p. 14, ll. 8-13, p. 11, ll. 4-6, paragraph bridging pp. 9-10, p. 10, ll. 9-21, and Request for Reconsideration, filed December 18, 2002, pp. 1-2); Claims 26-27 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Parker as applied to Claim 1 above, and further in view of Bialkowski; and Claims 26-27 were further rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Parker and

Houston et al. or Rule, Jr. as applied to Claim 1 above, and further in view of Bialkowski.

In General

By relying on 35 U.S.C. §103(a) as grounds for rejection based on alleged obviousness in view of multiple references and by various statements throughout the detailed Office Action, the Office already acknowledges certain important deficiencies of the base reference, Parker, which renders Parker inadequate by itself as a basis for rejecting any of the Claims 1-27. Additionally, Applicants respectfully submit that the Office Action has failed to show that any of the cited secondary references serve to overcome the deficiencies of Parker as explained below, and thus, all Claims 1-27 are in condition for allowance.

Moreover, it is respectfully submitted that merely combining elements found in various prior art patents to produce the Applicants' Claim 1-27 inventions is not a proper basis for a 35 U.S.C. § 103(a) rejection.¹ "Virtually all inventions are necessarily combinations of old elements. The notion, therefore, that combination claims can be declared invalid merely upon finding similar elements in separate prior patents would necessarily destroy virtually all patents and cannot be the law under the statute, '103.'"² Thus, the task of the Patent Office is essentially a burden of proof not just to show prior patents with selected elements similar to respective parts of a claimed combination, but to show teachings to support obviously combining the elements in the manner claimed. It is respectfully submitted that the Office Action fails to show where the cited references

¹ Graham v. John Deere Co., 383 U.S. 1 (1966) ("Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined only if there is some suggestion or incentive to do so.")(emphasis original)

² Panduit Corp. v. Dennison Manufacturing Co., 1 U.S.P.Q.2d 1593, 1603 (Fed. Cir. 1987; footnotes omitted).

provide the motivation for obviously combining their respective technologies in the manner claimed by the Applicants in Claims 1-27.

Further, Applicants respectfully submit that nothing contained in Applicants' detailed description should be construed as an admission of prior art. For example, Applicants respectfully submit that the detailed description of SHERLOCK® brand machine vision software simply provides an enabling disclosure by setting forth the best mode contemplated by the inventors to carry out the invention. Applicants respectfully submit that such machine vision software and other enabling examples in the detailed description were not used in the industry at the time of the invention as claimed. Thus, Applicants respectfully submit that the inventors' best mode examples are improper references and reliance thereon by the Examiner is misplaced.

Detailed Response

Applicants respectfully traverse the rejection of Claims 1-27 as allegedly failing to comply with 35 U.S.C. §112, first paragraph. Applicants respectfully submit that the subject matter of the claim(s) is described in the specification to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Respectfully, the disclosure taken as a whole (i.e., the specification with originally filed claims (e.g., Claim 15) and drawings) originally disclosed and clearly describes utilizing the pattern of reflected light to which the visual image corresponds to control paper formation in the web so as to enable any person skilled in the art to make and use the inventions claimed by Claims 1-27 without undue experimentation. By way of example, the Applicants respectfully direct the Examiner's attention to page 8, lines 22-30; page 9, lines 1-24, and page 12, lines 18-23 of the present specification. Thus, Applicants respectfully submit that Claims 1-27 comply with 35 U.S.C. §112, first paragraph, and respectfully request withdrawal of this rejection.

Applicants respectfully traverse the rejection of Claim 1 under 35 U.S.C. § 103(a) as allegedly obvious over Parker with or without Houston et al. or Rule, Jr. or Bialkowski with or without SHERLOCK®. Applicants respectfully submit that the cited patents, alone or in any reasonable combination, do not disclose each and every step of Claim 1, which recites a method of measuring paper formation or distribution in a papermaking process, comprising: (a) providing a forming fabric; (b) depositing a paper slurry upon the forming fabric to form a wet web; (c) transmitting light from a light source upon a first side of the wet web; (d) reflecting the light from the first side of the wet web to a camera, thereby forming a pattern of reflected light; (e) forming a visual image of the wet web corresponding to the pattern of the reflected light; and (f) utilizing the pattern of reflected light to which the visual image corresponds to control paper formation in the wet web.

The Office Action admits that Parker at least does not use reflected light to measure paper formation since to do so the base reference must be combined with Houston et al. or Rule, Jr. or Bialkowski as stated on page 3 of the Office Action.

Further, although the Office Action states that Parker teaches forming an image from reflected light at col. 6, ll. 40-44, Applicants respectfully submit that such reliance for obviousness is misplaced. Parker teaches obtaining electrical signals, which are utilized by DSP boards to detect variations in the web. For instance, on page 4, ll. 11-22, Parker teaches digitally processing its signals and forming tables and graphs to show variations and faults in a web. By way of further example, pages 9 and 10 of Parker teach that electrical signals are multiplexed, filtered (smoothed), and sampled (digitized) "for analysis by a computer" (col. 10, ll. 21-23). The cited disclosure is clearly not directed to the visual image as presently claimed.

In further contrast to Claim 1, Parker fails to disclose or suggest the use of a camera for forming the visual image of the wet web. The Office Action implicitly admits

this deficiency by stating that the photo detectors of Parker do not substantially differ from the camera as presently claimed and that it would have been obvious to use a line scan camera as the photo detector of Parker as taught by Rule, Jr. or Bialkowski. However, such a modification would destroy Parker as it is suited for its intended purpose. Applicants respectfully submit that one skilled in the art would not have been motivated to significantly alter or replace the lookers considered essential in Parker to measure electrical conductivity of the web with the camera as presently claimed.³

Houston fails to remedy the deficiencies of Parker. Houston discloses a formation tester that requires that a strobe light be positioned on the opposite side of a paper web from a camera. When analyzing formation, Houston teaches, “[t]o determine formation and blackening, the strobe light illuminates the web from one side of the web with the video camera directed at the opposite side of the web.” (Col. 3, lines 38-41.) In contrast, in Claim 1 of the present invention, light is transmitted and detected from the same side of the wet web.

Rule, Jr., too, fails to remedy the deficiencies of Parker with or without Houston. As noted above, removing and replacing the lookers of Parker, which are intended to measure electrical conductivity, with the substantially different line scan camera of Rule, Jr. would destroy Parker as it is suited for its intended purpose. Moreover, similar to Houston, Rule, Jr. teaches placing a plurality of lights on an opposite side of a sheet, which is substantially different than the steps of pending Claim 1.

Bialkowski also does not remedy the deficiencies of Parker with or without Houston or Rule, Jr. Bialkowski discloses an optical sensor for determining the location of the wet line of a paper machine, but does not disclose a method for measuring and controlling paper formation as defined in Claim 1. Furthermore, removing and replacing

³ See note 1.

the lookers of Parker with the optical sensor of Bialkowski would destroy Parker as it is suited for its intended purpose.

As noted above, Applicants respectfully submit that the original detailed description merely provided best mode examples for various elements and steps of the invention, and as such, SHERLOCK®, PIRANHA® and the like are improper references not to be relied upon to correct deficiencies of the references discussed above.

Thus, Applicants respectfully submit that one of ordinary skill in the art, when presented with the cited patents, would not have been motivated to combine the patents since at least the intended purpose of the primary reference, Parker, would be destroyed. It is respectfully submitted there would be no incentive to do so.⁴ Therefore, one of ordinary skill could only have rectified the deficiencies of the cited patents using impermissible hindsight afforded by the present application. Accordingly, Applicants respectfully submit that Claim 1 is patentable over the cited patents and respectfully request that the Examiner remove the rejection to Claim 1 and its dependent Claims 2-11 and indicate their allowance.

Applicants respectfully traverse the rejection of independent Claim 12 as allegedly unpatentable under 35 U.S.C. §103(a) over Parker with or without Houston et al. or Rule, Jr. or Bialkowski as applied to Claim 1 above, and further in view of allegedly Admitted Prior Art. Applicants respectfully submit that Claim 12 and its dependent Claims 13-25 further particularly describe and distinctly claim their respective inventions and are patentable over the cited references for at least the reasons discussed above. Accordingly, Applicants respectfully request withdrawal of the rejection and allowance of Claims 12-25.

⁴ See note 1.

Finally, Applicants respectfully traverse the rejection of independent Claim 26 under 35 U.S.C. §103(a) as allegedly unpatentable over Parker as applied to Claim 1 above, and further in view of Bialkowski, and as allegedly unpatentable over Parker and Houston et al. or Rule, Jr. as applied to Claim 1 above, and further in view of Bialkowski. Applicants respectfully submit that Claim 26 and its dependent Claim 27 further particularly describe and distinctly claim their respective inventions and are patentable over the cited references for at least the reasons discussed above. Accordingly, Applicants respectfully request withdrawal of the rejection and allowance of Claims 26-27.

Applicants respectfully submit that the present Request for Reconsideration raises no new issues requiring an additional search by the Examiner, responds directly to matters raised in the Office Action, and places the Application in condition for allowance.


If the Examiner has any questions upon consideration of this Request for Reconsideration, Applicants invite the Examiner to contact the undersigned at his convenience.

Please charge any additional fees required by this Request for Reconsideration to Deposit Account No. 04-1403.

Respectfully submitted,

DORITY & MANNING, P.A.

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Date


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